

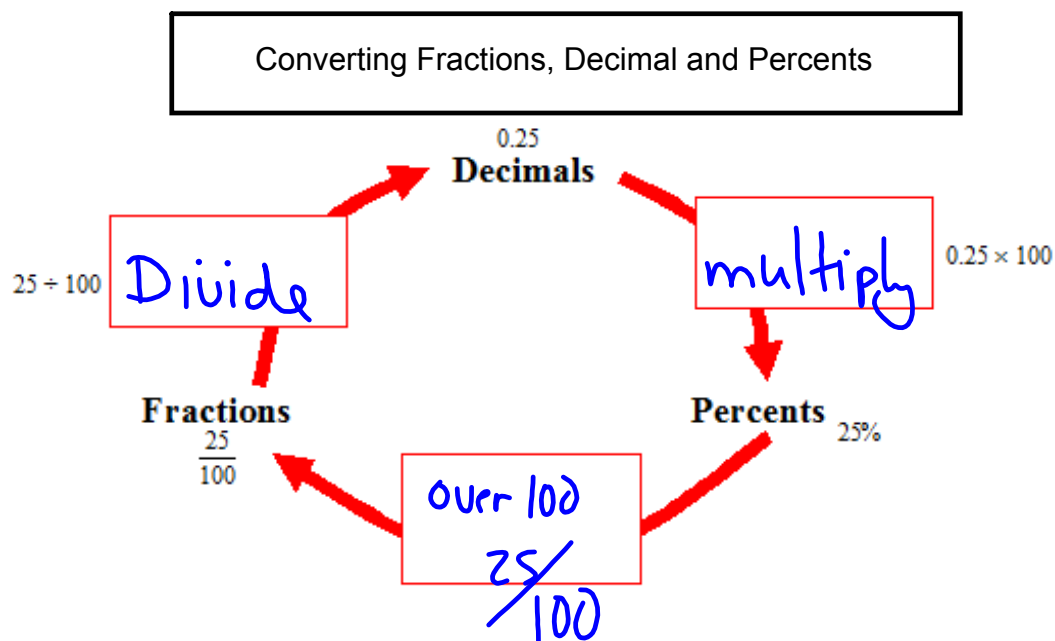
L5(4.6) Percentages

Why do we use them?

- Easy way to compare things
- A percent means out of 100.
- A fraction in which the denominator is 100.



97% of teens play video games



Complete the following table.

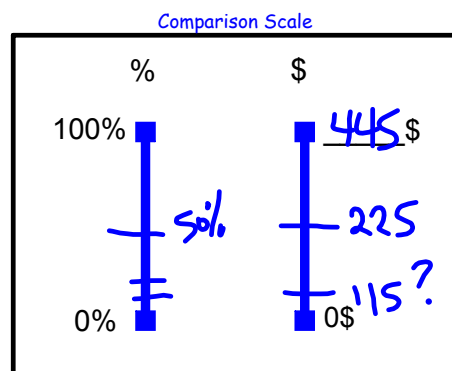
	Fraction	Ratio	Decimal	Fraction (denominator of 100)	Percent
a)	1/4	1:4	0.25	25/100	25%
b)			0.8		
c)			0.2		
d)	1/11				
e)	6/4				

Ex.1: Find 15% of \$445.

$$\frac{15}{100} = \frac{x}{445}$$

$$\frac{15 \times 445}{100} = x$$

$$x = 66.75$$

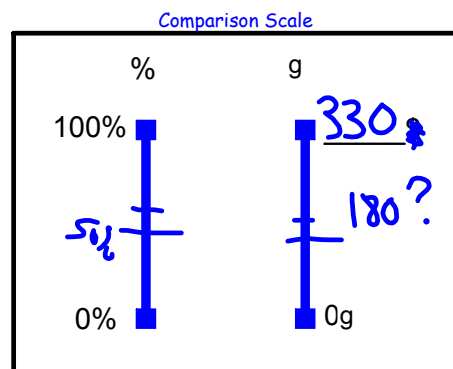


Ex.2: Find 60% of 330g.

$$\frac{60}{100} = \frac{x}{330}$$

$$\frac{60 \times 330}{100} = x$$

$$x = 198$$



Ex.3: The game Call of Duty Black Ops III retails for \$59.99.

- a) How much is the sales tax on this game?
b) What is the selling price including taxes?

13%



$$a) \frac{13}{100} = \frac{x}{59.99}$$

$$\frac{13 \times 59.99}{100} = x$$

$$x = 7.79$$

∴ the selling price
is \$ 67.78

Ex.4: The price of a Louis Vuitton bag is \$655.

- a) If the bag was on sale for 35% off, what would the discounted price be (not including taxes)?
b) How much would it cost to buy the bag (including taxes)?



$$\frac{35}{100} = \frac{x}{655}$$

$$\frac{35 \times 655}{100} = x$$

$$x = 229.25$$

$$= 655 - 229.25$$

= 425.75
Sale price without
taxes

$$b) \frac{13}{100} = \frac{x}{425.75}$$

$$x = 55.35$$

35% off
\$655

Assigned Work
p.137 #1abc, 2, 3, 4, 5, 6

$$= 425.75 + 55.35$$

$$= \underline{481.10} \text{ total price}$$